

## **ENVIRONMENTAL ASSESSMENT**

### **GEIGER SPUR RAILROAD TRACK REMOVAL SPOKANE COUNTY ROAD PROJECT #3091**



**FAIRCHILD AIR FORCE BASE, WASHINGTON**

**DEPARTMENT OF THE AIR FORCE  
AIR MOBILITY COMMAND  
FAIRCHILD AIR FORCE BASE, WASHINGTON**

**March 2011**

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## **FINDING OF NO SIGNIFICANT IMPACT**

### **GEIGER SPUR RAILROAD TRACK REMOVAL SPOKANE COUNTY ROAD PROJECT #3091 FAIRCHILD AIR FORCE BASE, WASHINGTON**

Federal actions that potentially involve significant impacts to the environment must be reviewed in accordance with the National Environmental Policy Act and all other applicable environmental laws. The U.S. Air Force has completed an Environmental Assessment (EA) of the potential environmental consequences associated with the Geiger Spur Railroad Track Removal at Fairchild Air Force Base (FAFB). This Finding of No Significant Impact (FONSI) incorporates the EA by reference and summarizes the results of the evaluation.

**Background:** In order to address installation security concerns, Spokane County has agreed to remove 2 miles of the Geiger Rail Spur track, ties and ballast on FAFB. FAFB had security concerns with the operation of an industrial rail line within the boundaries of the base and across the entrance road to the FAFB main gate. An existing license agreement has since been extended to allow completion of this project during the 2011 construction season.

**Preferred Action - Alternative 1:** Alternative 1 is the preferred alternative. This alternative will remove the rails, ties, and ballast and will restore the Geiger Spur area on FAFB by re-grading for proper drainage and removing gates and crossings. This project will also insure that no hazardous conditions are left behind that would impact future uses or occupants of FAFB or nearby residents.

**No-Action Alternative:** The No-Action Alternative serves as a baseline against which other alternatives can be evaluated. This alternative is required under the Council on Environmental Quality (CEQ) regulations. Under the No-Action Alternative, removal of the Geiger Spur track from FAFB would not be accomplished, and the site would not be restored.

**Anticipated Environmental Effects - Preferred Alternative:** The Preferred Alternative and the No-Action Alternative have been reviewed in accordance with NEPA, as implemented by the regulations of the Council on Environmental Quality and 32 CFR 989. The following summarizes the results of the attached EA:

**Air Quality and Noise:** Once complete, the proposed action will not result in additional air pollution or noise. During construction, potential exists for minimal, short-term impacts to local air quality and increases in noise. Existing air permit thresholds for pollutants and noise thresholds will not be exceeded during this period. The contractor is required to develop a dirt and dust control plan for the construction site, which aims to minimize airborne dust. Therefore, there will be no significant air quality or noise impacts resulting from the proposed project.

**Water Resources:** The proposed action will result in a decrease in storm water runoff, and runoff will continue to be accommodated by catchment and conveyance in the

existing storm water system and by local dispersal and infiltration into the natural environment.

No impact to water quality is anticipated. Sediment delivery to surface water bodies is not likely, as there are no watercourses within the proposed construction site. Storm water is treated either by settlement and infiltration or by infiltration prior to entering the groundwater. A Stormwater Pollution Prevention Plan is required for every construction site which will control sediment runoff during ground disturbance. The project site will be stabilized with vegetation upon completion. Hazardous waste will be disposed in accordance with all regulations and laws to protect water quality.

**Geologic Resources:** Earthwork will be conducted in accordance with best management practices for erosion control, as outlined by the Storm Water Pollution Prevention Plan for the proposed project. The terrain is nearly flat, and final grading of disturbed areas will allow for proper drainage. No significant geologic, physiographic, or soil impacts are anticipated as a result of the proposed activities.

**Biological Resources:** The proposed action would result in an increase of approximately 12 acres of unimproved, dry grassland and open space. The current condition is poor, as the area is kept in a mowed or bare ground condition to reduce the fire hazard from operation of the railroad. The change will be an improvement in wildlife habitat for some species of birds and small mammals. There are no protected species or habitats in the project area.

**Cultural Resources:** There are no known cultural resources existing in the region of influence of the proposed project. The probability is low that undisturbed, significant archaeological resources, including human graves, will be discovered during construction in this area. The Integrated Cultural Resources Management Plan (ICRMP) sets forth standard procedures that must be followed in the event any type of archaeological site is discovered during the course of earth-disturbing activity on base. With adherence to the ICRMP procedures, there will be no impacts to cultural resources.

**Infrastructure and Utilities:** The proposed action will result in only a minor, short-term temporary increase in traffic volume in the vicinity during construction. Track will be removed at two crossings--the Rambo Road crossing at the southeast end of the project and the Mitchell Road crossing at the Main Gate near the northwest end of the project. It will, therefore, have a positive impact on the transportation network of FAFB by removing these potential obstructions. This project will not use any existing utilities such as communications, water, sanitary sewer, IT, and storm water after construction is complete.

**Land Use:** The proposed action will result in the conversion of land from industrial to unimproved land use. This change is compatible with the FAFB General Plan. Therefore, there should be no unanticipated significant effects to land use.

**Wastes and Hazardous Materials and Pollution Prevention:** The proposed action will require handling and removal of hazardous materials associated with the railroad operation, specifically the railroad ties and the associated soil contaminated with poly-aromatic hydrocarbons (PAHs) that are related to creosote in ties and that were identified above cleanup levels in the surface ballast materials. The cleanup will be done in accordance with the Cleanup Action Plan for the Geiger Spur Track Removal Project, June 15, 2010. The railroad ties, as the identified source of the contamination, will be removed in their entirety from the site and reused or disposed of in accordance with Washington State Dangerous Waste regulations. Contaminated and potentially contaminated soils directly beneath the railroad ties will be excavated, stockpiled, and tested for PAH levels. Soils above cleanup levels will be disposed of at a lined landfill.

In the opinion of the Washington State Department of Ecology, provided September 29, 2010, upon completion of this proposed cleanup, further remedial action will not likely be necessary to clean up contamination at the Geiger Spur Track Removal site. Also, there are no Environmental Restoration Program sites identified within the 12 acre area of the proposed action. Therefore, no significant impacts are anticipated in the implementation of this proposed project. In fact, the restoration of this area will have a positive effect with removal of hazardous material contamination and prevention of further pollution.

**Safety and Occupational Health:** No significant effects are anticipated during construction of the facility, since work will be performed in accordance with all applicable safety and occupational health standards. Included in this would be safety precautions related to handling of any contaminated soils encountered. Removal of the rail line and any associated hazardous materials will improve opportunity to provide a safe working and living environment and minimize opportunity for groundwater contamination due to past rail operations.

**Socioeconomic:** This project will not result in any change or impact to Social and Economic Conditions on or near FAFB nor will it result in any disproportionate impacts on low income populations on or near FAFB.

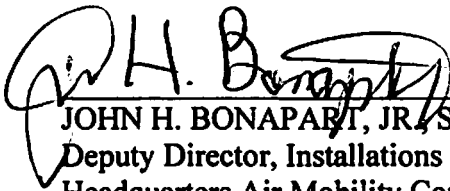
**Indirect and Cumulative Impacts:** An analysis of the Proposed Action, in conjunction with other present and proposed activities, concluded that no significant cumulative environmental impacts would occur. The effects of construction of a new rail line to reroute the Geiger Spur off FAFB have been addressed in State Environmental Policy Act documents (Environmental Checklist and Determination of Non-Significance dated November 22, 2006) prepared by Spokane County per the Spokane County Environmental Ordinance. Potential future, but unforeseen, other land uses for the area would be governed by the FAFB General Plan, developed to minimize adverse impacts of future land use decisions. This proposed action is in compliance with the vision of the FAFB General Plan for the area.

**Public Review:** A Notice of Availability for the Draft EA was provided as a news release to the local press on 14 March 11 and made available on the FAFB web site on 16 March 11.

Copies of the draft EA were provided to Spokane public library as well as Airway Heights public library. Public comment period ended on 31 March 2011 and no comments were received. Therefore, the final EA was not revised. No additional measures were recommended.

**Conclusion:** Based on the attached EA conducted in accordance with the requirements of NEPA, CEQ Regulations, and 32 CFR 989, I conclude that the Proposed Action will have no significant individual or cumulative impact upon the environment. An Environmental Impact Statement is not warranted and one will not be prepared.

The signing of this FONSI completes the Environmental Impact Analysis Process under Air Force regulations.



JOHN H. BONAPART, JR., SES, DAFC  
Deputy Director, Installations and Mission Support  
Headquarters Air Mobility Command  
Scott Air Force Base, Illinois

1 JUNE 11  
DATE

## **COVER SHEET**

### **ENVIRONMENTAL ASSESSMENT**

## **GEIGER SPUR RAILROAD TRACK REMOVAL SPOKANE COUNTY ROAD PROJECT #3091**

### **FAIRCHILD AFB, WASHINGTON**

**Responsible Agency:** Department of the Air Force, Air Mobility Command, Fairchild Air Force Base (AFB), Washington.

**Proposed Action:** Remove Two Miles of Geiger Spur Railroad Track including rail, ties and ballast. Project is located at Fairchild AFB, Spokane County, Washington.

**Contact Information:** Comments and inquiries regarding this document should be directed to: Public Affairs, 1 East Bong St., Fairchild AFB, WA 99011. Phone: (509) 247-5704.

**Report Designation:** Environmental Assessment

**Public Review Period:** Public review will be conducted from March 16 through April 1, 2011

**Abstract:** As a part of the license agreement for operation of the Geiger Spur Railroad on FAFB, Spokane County is required to remove the two miles of Geiger Spur track including rails, ties and ballast from Fairchild AFB. The only alternative to the Proposed Action is the No-Action alternative. The No-Action Alternative, a non-viable alternative, provides contrast and comparison to the viable alternative and its relative environmental affects. No significant impacts would result from implementation of the Proposed Action or the No-Action Alternative.

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## LIST OF ACRONYMS AND ABBREVIATIONS

|                 |   |
|-----------------|---|
| AICUZ           | Air Installation Compatible Use Zone            |
| AFRC            | Armed Forces Reserve Center                     |
| ARW             | Air Refueling Wing                              |
| BRAC            | Base Realignment and Closure                    |
| CAA             | Clean Air Act                                   |
| CFR             | Code of Federal Regulations                     |
| CO              | Carbon Monoxide                                 |
| DRMO            | Defense Reutilization and Marketing Office      |
| EA              | Environmental Assessment                        |
| EIAP            | Environmental Impact Analysis Process           |
| EIS             | Environmental Impact Statement                  |
| EO              | Executive Order                                 |
| EOD             | Explosive Ordinance Disposal                    |
| EPA             | U.S. Environmental Protection Agency            |
| FONSI           | Finding of No Significant Impact                |
| FAFB            | Fairchild Air Force Base                        |
| MSL             | Mean Sea Level                                  |
| MTCA            | Washington State Model Toxics Control Act       |
| NAAQS           | National Ambient Air Quality Standards          |
| NEPA            | National Environmental Policy Act               |
| NO <sub>x</sub> | Nitrogen Oxides                                 |
| NPDES           | National Pollutant Discharge Elimination System |
| NPL             | National Priority Listing                       |
| PAH             | Polycyclic Aromatic Hydrocarbons                |
| PCB             | Polychlorinated biphenyls                       |
| PM              | Particulate Matter                              |
| POV             | Privately Owned Vehicle                         |
| PPA             | Pollution Prevention Act                        |
| RCRA            | Resource Conservation and Recovery Act          |
| TCLP            | Toxicity characteristic leaching procedure      |
| TEC             | Toxicity equivalent concentration               |
| TPH             | Total petroleum hydrocarbons                    |
| TSD             | Treatment, Storage and Disposal                 |
| WAARNG          | Washington Air Reserve National Guard           |
| USAF            | United States Air Force                         |

## **Chapter 1: Purpose and Need for Action and Scope of Analysis**

### **1.1 Introduction and Background**

In September 2004, Spokane County (County) assumed ownership of the then 5-mile long Geiger Spur railroad from Burlington Northern –Santa Fe Railroad (BNSF). The line then ran from the BNSF mainline at the northwest corner of Fairchild Air Force Base (FAFB) east to near the intersection of Hayford and McFarlane Roads in the southeast corner of the City of Airway Heights, WA. As part of the license agreement with Fairchild Air Force Base (FAFB) to continue operation of the two miles of this line located on FAFB for the next five years, the County agreed to discontinue operation and remove the track, ties, ballast no later than September 30, 2009. FAFB had security concerns with the operation of an industrial rail line within the boundaries of the Base and across the entrance road to the FAFB main gate.

Since the agreement has been signed the County has constructed 3.5 miles of new rail line realigning the Geiger Spur to the south to connect with the CW branch line of the PCC rail line. Construction on this new alignment was completed in 2008. The Geiger Spur rail traffic no longer operates across the FAFB. To complete County obligations under the license agreement, the County must now remove the track, ties, ballast and remove and regrade associated roadbed fill, and remove gates and crossings. See Fig. 1, Geiger Spur Site Map. The license agreement has been extended to allow completion of this work during the 2011 construction season.

This environmental assessment (EA) will determine whether the proposed action of removing two miles of railroad on FAFB would result in any significant impacts. If impacts are predicted, mitigation would be prescribed to reduce impacts below the level of significance or recommend the preparation of an Environmental Impact Statement (EIS) to address unmitigated impacts or abandon the proposed action. This EA would also be used to guide the implementation of the proposed action consistent with laws, regulations, and U. S. Air Force standards for environmental stewardship.

Chapter 1 includes background information relevant to the proposed action, the purpose and need for the proposed action, an overview of the scope of the analysis and a summary of key environmental compliance requirements.

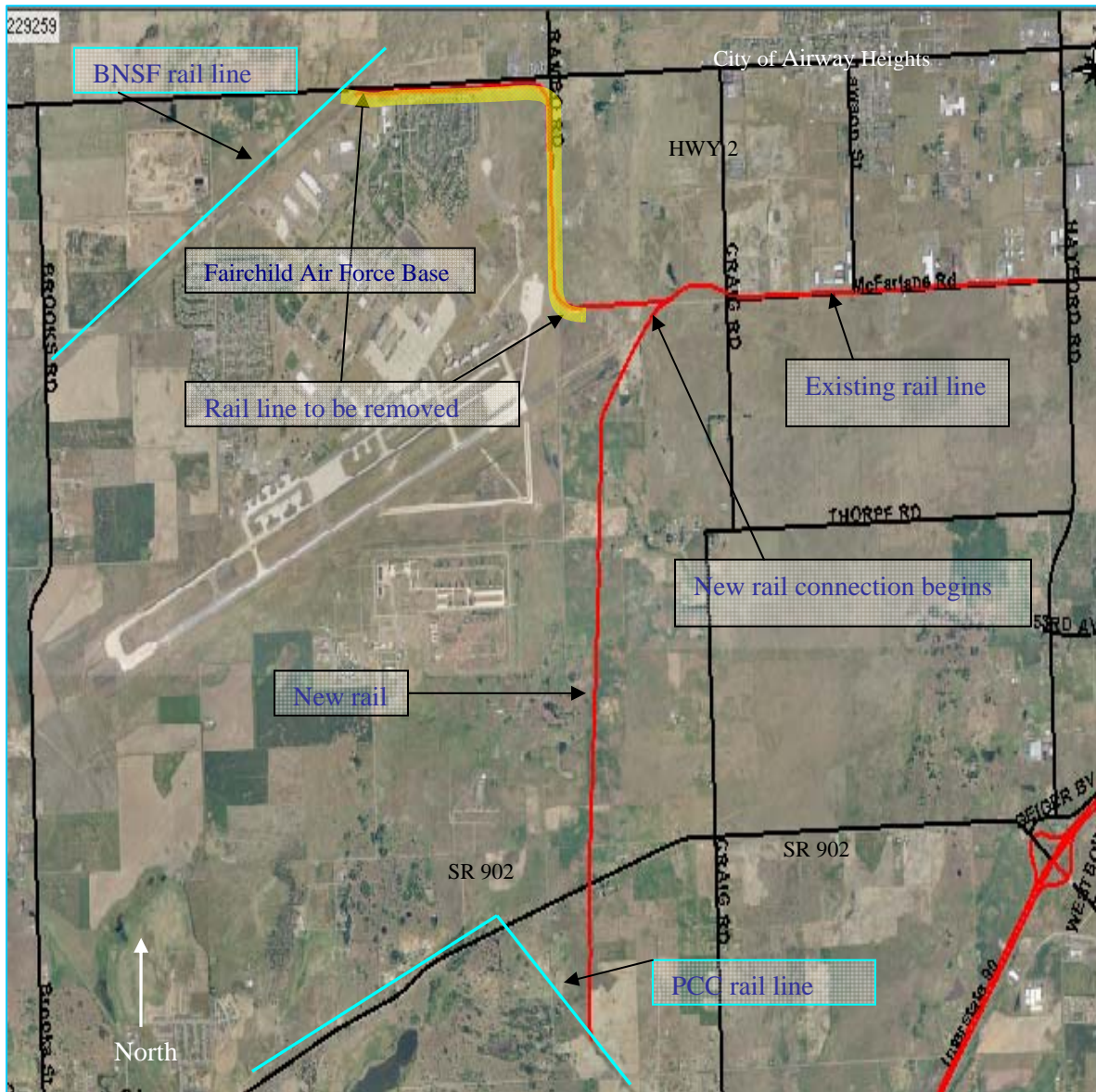
### **1.2 Purpose and Need for the Proposed Action**

The Fairchild Air Force Base requires that the Geiger Spur rail line be removed to improve security and restore the rail line area to a safe condition.

### **1.3 Objectives of the Action**

The objective of this action is to remove all track, ties, and ballast and grade for proper drainage. This project will also enhance security and insure that no hazardous conditions are left behind that would impact future uses or occupants of the FAFB or nearby residents.

**Fig. 1 - Geiger Spur Site Map**



## **1.4 Scope of the Environmental Assessment**

This EA will evaluate, to the fullest extent possible, the environmental consequences of the proposed action and alternatives on the affected environment, as well as possible cumulative impacts from other reasonably foreseeable future actions. The data obtained through completion of the EA will in turn be utilized to assist decision making authorities in making environmentally informed decisions. This EA is being completed in accordance with the requirements of the National Environmental Policy Act (NEPA) of 1969.

The evaluation will determine whether the proposed action would result in environmental impact significant enough to warrant preparation of an Environmental Impact Statement (EIS), or whether the action would qualify for a Finding of No Significant Impact (FONSI).

Resources to be considered include: air quality, water resources, noise, geologic resources, biological resources, cultural resources, infrastructure and utilities, land use, wastes, pollution prevention and hazardous materials, safety and occupational health, and socioeconomic resources.

## **1.5 Summary of Key Environmental Compliance Requirements**

### **National Environmental Policy Act of 1969 (NEPA), as amended**

NEPA requires all Federal agencies to use a systematic, interdisciplinary approach in decision making which may have an impact on man's environment. Therefore, NEPA directs agencies to assess expected environmental impacts of all Federal actions and proposals. In turn, this data must be considered in the decision making process. Compliance with NEPA is accomplished through the guidance outlined in 32 CFR 989, Environmental Impact Analysis Process (EIAP).

### **Other Environmental Statutes and Regulations**

To comply with NEPA, this analysis considers other relevant environmental statutes and regulations. According to the Council on Environmental Quality regulations, requirements of NEPA must be integrated "with other planning and environmental review procedures required by law or by agency so that all such procedures run concurrently rather than consecutively." Appendix D contains examples of relevant laws, regulations, and other requirements that are often considered as part of the analysis.

## **Chapter 2: Description of Proposed Action and Alternatives**

### **2.1 Introduction**

As part of the 2004 license agreement with Fairchild Air Force Base (FAFB) to continue operation of the portion of Geiger Spur located on FAFB, the County agreed to discontinue operation and remove the rail track line from FAFB no later than September 30, 2009. This completion date has been extended to allow completion during the 2011 construction season. This proposed Geiger Spur Track Removal Project fulfills this requirement with the following:

- Removal of all rail, ties and ballast from the FAFB
- Removal of any fill contaminated from Geiger Spur operations.
- Re-grading of any clean road bed fill to provide proper drainage and refill any cut areas.
- Restore disturbed areas with dryland grass seeding and treated to prevent noxious weeds.
- Remove all gates in fence lines and replace with chain link fence to match adjacent fencing. Reinstall existing force protection cabling in appropriate areas.
- Removal of Main Gate, Eaker Road and Rambo Road rail crossings including repaving to match existing pavement cross sections. Crossing removal and repaving work to be scheduled to minimize disruption to traffic.

### **2.2 Selection Criteria for Alternatives**

Viable alternatives must consider FAFB operational requirements including safety, cost effectiveness, efficiency, and compatibility with other FAFB operations. Environmental criteria considered must include: air quality, water resources, geologic resources, biological resources, cultural resources, infrastructure and utilities, land use, noise, wastes and hazardous materials, pollution prevention, socioeconomic resources, safety and occupational health; and environmental management.

### **2.3 Alternatives Considered but Eliminated from Detailed Study**

There were no other alternatives considered.

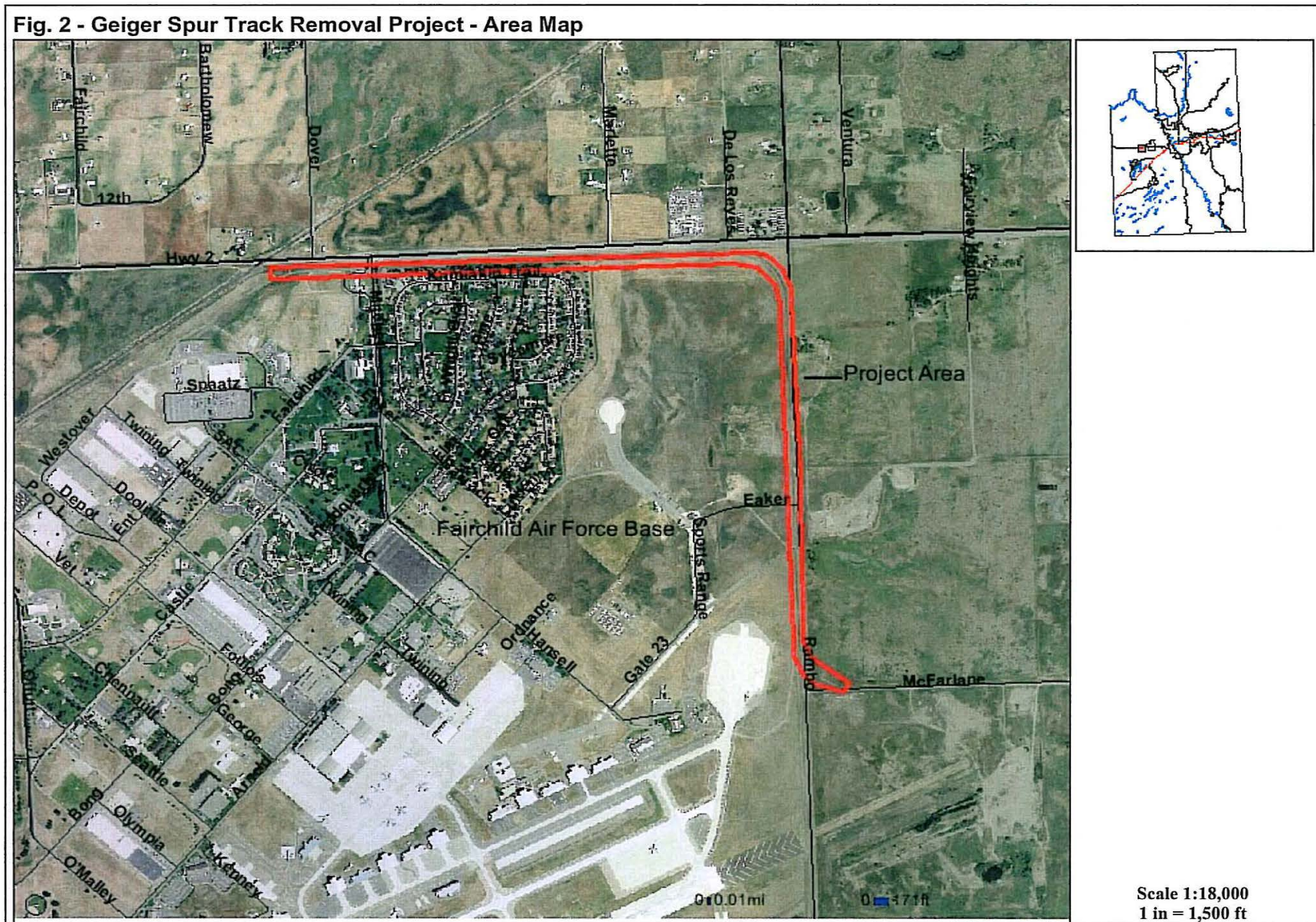
### **2.4 Description of Alternatives**

Alternative 1 is the preferred alternative. The alternative will remove the rails, ties, ballast and restore the Geiger Spur area on FAFB by grading for proper drainage and removing gates and crossings. This project will also insure that no hazardous conditions are left behind that would impact future uses or occupants of the FAFB or nearby residents.

The No Action alternative serves as a baseline against which other alternatives can be evaluated. This alternative is required under the Council on Environmental Quality regulations. Under the No Action alternative, the removal of the Geiger Spur track from the Fairchild AFB would not be accomplished and the site would not be restored.



Figure 2. Geiger Spur Track Removal Project Area Map





## **Chapter 3: Affected Environment**

### **3.1 Introduction**

Fairchild AFB is an Air Mobility Command (AMC) Base located in Spokane County, eastern Washington, approximately 12 miles west of the city of Spokane. Communities located near the base include Airway Heights and Medical Lake. Fairchild AFB consists of a main installation and several satellite installations located elsewhere west of Spokane. The main installation consists of 5,823 acres and 1,259 buildings. Fairchild AFB is a tanker hub, 92 Air Refueling Wing (92ARW), and operates currently 35 KC-135 aircraft with 56 aircrews. FAFB personnel average about 5,400 military and civilians. In addition to 92 ARW, 15 tenant units, including Air Education and Training Command (AETC) Survival School, 141<sup>st</sup> Air Refueling Wing, and Washington Air National Guard (WANG) occupy the Base. A new Armed Forces Reserve Center was recently added with the PFC Joe E Mann Hall U.S. Army Reserve Center #80 and 1<sup>st</sup> LT Richard H. Walker Army National Guard (WAARNG) Armory relocated to FAFB. The Geiger Spur, an industrial rail line serving businesses along McFarlane Road, to the east of FAFB, has operated in its current location along the north and northeast boundaries of FAFB, since the 1940's. Rail operations moved to the new Geiger Spur alignment in early 2009 so rail traffic no longer operates on FAFB.

### **3.2 Air Quality and Noise**

#### **Air Quality**

Of the six criteria pollutants identified by the U.S. Environmental Protection Agency (EPA), two are of concern in Spokane County, specifically carbon monoxide (CO) and particulate matter (PM). Motor vehicles are the largest contributors to CO, with the highest concentrations occurring during the winter months. PM comes from a variety of sources including dust from unpaved and paved roadways, construction activities, gas and diesel engines, and indoor/outdoor burning.

Spokane County is within the Eastern Washington-Northern Idaho Interstate (EWNII) Air Quality Control Region. Spokane County is classified as being in attainment with all criteria pollutants (USEPA 2004b). CO and PM Attainment Plans rely on control strategies for tracking vehicle miles traveled; vehicle emissions inspection and maintenance programs; oxygenated fuels; transportation conformity; control measures for residential wood combustion and control strategies for windblown dust.

The Spokane Regional Clean Air Agency works with FAFB in monitoring and implementing the installation's stationary source permits and emissions inventory. Emissions from mobile sources are not tracked on FAFB. FAFB is classified as a synthetic minor pollution source and has voluntary limits on air emissions. There are various stationary combustion sources at FAFB, mostly from boilers and generators; volatile sources from organic liquids, and miscellaneous particulate sources from abrasive blasting, woodworking equipment, and a dust collection system designed to capture emissions from a firing range.

Regional wind patterns generally transport air pollutants eastward from FAFB toward the Spokane Valley. Winter months have the highest incidences of degraded air quality due to wood burning stoves and vehicular emissions. These emissions are exacerbated by temperature inversions, stagnant air reduces air quality, and valley topography.

### **Noise**

Locally, noise sources are general construction, vehicular movement along Interstate 90, U.S. Route 2 and secondary commuter roads, and aircraft at FAFB, and Spokane International Airport. Other sources with varying frequency are the Spokane Raceway along Hayford Road and firing range activities on FAFB and along the Spokane River. Residential development is increasing in the area, mostly of rural character although several large high density housing areas are under construction within five miles of FAFB and within ½ mile of Spokane Raceway. Highest density housing is located in the communities of Medical Lake and Airway Heights located about 2 miles from FAFB.

### **3.3 Water Resources**

Fairchild Air Force Base is located at the hydrologic head of three watershed basins; the Lower Spokane River, Hangman Creek, and the Palouse River. FAFB contains several open drainage ditches, storm water detention ponds/swales, and isolated wetlands. The topography is nearly flat to undulating with no indication that surface runoff is conveyed by surface flow to stream channels within these watersheds. The primary function of surface water features on the Base is temporary containment of storm water and groundwater recharge. The general area is represented by varying depths of groundwater perched by hard basalt bedrock or lenses of clay in surficial glacial melt water deposits. Depths range from 5 -40 feet. Two deep aquifers are the primary source of water to surrounding communities, residences, and agriculture. Well depths range from 100-200 and 400-500 feet.

No FAFB surface storm water catchment is indicated in the immediate vicinity of the proposed facility. Washington State Department of Transportation does have underground conveyance within the vicinity associated with the Hwy. 2 underpass at the Northwest corner of the base. Stormwater is pumped from underpass catch basins up and under the Geiger Spur onto a grassy swale on the south side of the Geiger Spur track.

Existing runoff from Geiger Spur impervious and semi-impervious areas currently disperse by overland flow and infiltrate rapidly into sandy soils.

Engineered catchment and conveyance of storm water is designed elsewhere on Base and drains to a passive treatment system of settling ponds prior to being routed to an adjacent agricultural field. Surface waters are infiltrated into native soils within about one half mile of the settling ponds.

The FAFB Storm Water Pollution Prevention Plan (SWPPP) was written to identify existing and potential sources of storm water pollution. The current systems are in compliance with all state and federal storm water regulations. As an Air Force and Base standard, a site SWPPP is required for all construction activities.

FAFB has a contract with the City of Spokane for treatment of sanitary sewage. The sewage is routed to the Spokane Regional Wastewater Treatment Facility located on the Aubrey L. White Parkway adjacent to the Spokane River. Treated water (tertiary treatment) is then discharged into the Spokane River. Much of the Spokane River presently violates Washington State water quality standards for various pollutants from many different sources. Currently, Total Maximum Daily Load (TMDL) plans are in place to clean up the Spokane River water. TMDLs for dissolved oxygen and PCBs are currently in place, while TMDLs would most likely be developed for chromium and temperature.

### **3.4 Geologic Resources**

General topography of FAFB is flat and the average elevation is approximately 2340 feet. Fairchild is located on an intermountain plain and is situated on the channeled scablands of the Columbia Basin. To the south of the Base, the terrain blends into the rolling, deep loess topography of the Palouse that extends southward to the Snake River. The channeled scablands were formed from catastrophic floods during ice dam breaks in glacial times and are a major part of the landscape from the Spokane area southwestward to Moses Lake and as far south as the Columbia River.

Soils in the channeled scablands can be quite variable and contrasting. Typically soils consist of shallow regolith underlain by basalt bedrock with a thin layer of volcanic ash influenced loess on the surface. Deeper soils occur associated with glacial flood and melt water deposits of sand, silts, and clays. Remnant clayey lacustrine materials or deeply weathered basalt bedrock often perch water tables in the area.

The proposed project area has been disturbed and altered by previous earth-moving activities related to the construction, operation and maintenance of the rail line and associated drainage facilities. Natural Resource Conservation Service (NRCS 2006) mapped the Bong- Phoebe fine sandy loams, Cheney-Uhlig silt loams, Cheney- Uhlig complex and Uhlig silt loam map units in the project area. These soils are characterized as sandy and gravelly glaciofluvial deposits with loess and volcanic ash surface layers. Soils are well drained to somewhat excessively well drained, very deep, and have moderate over very rapid permeability. The soils map is provided in Appendix E.

### **3.5 Biological Resources**

Improved and semi-improved areas make up 80% of FAFB and are mostly found in the northern portion of the base. Non-native landscaping and groundcover in the improved areas have removed much of the historic vegetative cover. The semi-improved areas are primarily composed of mowed non-native and native grasses. The remaining 1,000 acres is undeveloped land that contains open grass fields, stands of

ponderosa pines, wetland areas, native grassland and shrubs, and areas of mixed native and non-native grasses and invasive weeds.

The proposed project area is managed as improved and semi-improved, is non-irrigated and is vegetated with introduced and native grasses. The area is mowed and or treated with herbicides to reduce weed growth and seed dispersal and to minimize the fire hazard associated with operation of the rail line.

In general, wildlife habitat and species present within the project area and at Fairchild AFB are typical of urban and suburban areas and open pine savanna. Migratory birds and raptors common to eastern Washington frequent the area. Small mammals include mice, voles, coyote, marmot, and pocket gophers. A small deer herd is isolated within the boundary fence, numbers about 40, and roams the southern end of the Base.

*Silene spaldingii* ( *Spalding's silene*) and *howellia aquatilis* ( *water howelia*) are threatened plant species, both federally and state listed. They occur in the southern portion of the Base, in an unimproved area well away from the proposed project area and within a designated conservation area. The community type, *pinus ponderosa/symphocarpus albus* is listed as a rare community type by the state of Washington and occurs in isolated pine stands in the southern portion of the Base, well away from the proposed project area. No other threatened or endangered species have been identified by surveys conducted by the Nature Conservancy, the Washington State Department of Natural Resources, or Eastern Washington University.

Several bird species, designated as Federal species of concern, state candidate species, state monitor species, or state sensitive species have been sighted or are known to have nested near or on FAFB. Most of these species are migratory in nature. These species include: golden eagle, burrowing owl, grasshopper sparrow, western bluebird, red-necked grebe, great blue heron, turkey vulture, Caspian tern, black tern, and osprey. The white-tailed jackrabbit, a state candidate species, is known to occur adjacent to FAFB but has not been sighted for many years on the Base. Columbian ground squirrel and American badger, both being carefully monitored by the Washington Department of Fish and Wildlife, have been documented as occurring at FAFB but recent surveys (EWU 2005) have not indicated their presence on Base. The likelihood of these species nesting or denning in the area of the proposed project is very small. There are no trees or structures to accommodate nesting and the level of disturbance from human activity is relatively high in the area.

Over 200 acres of wetlands occur at Fairchild AFB. Nearly all of the wetlands are found in the southern portion of the base, far from the proposed project location.

### **3.6 Cultural Resources**

Cultural resources include prehistoric and historical archaeological sites, buildings, structures, districts, artifacts, objects, or any other physical evidence of human activity considered important to a culture, subculture, or community for scientific,

traditional, or religious purposes. Five complete historical and archaeological surveys of installation lands have been completed at Fairchild AFB. Findings include six archaeological sites, one of which may be eligible for nomination to the National Register of Historic Places. Two WWII and two Cold War buildings may be eligible for inclusion in the National Register. One additional WWII building is eligible for nomination to the National Register. None of these sites or structures are located in the region of influence of the proposed project. There are no documented sites or areas of known cultural importance to local Native American tribes on base holdings and the potential for discovery of such sites is low. The probability is also low that undisturbed, significant archaeological resources, including human graves, would be discovered on Fairchild AFB during future construction.

No known prehistoric or historic resources have been identified and no known potential for historic resources has been identified in cultural resource surveys of the proposed project site.

### **3.7 Infrastructure and Utilities**

Infrastructure consists of the systems and physical structures that enable a populace to function and to accommodate mission operations. On FAFB infrastructure includes a transportation network, utilities, communications, airfield and support buildings, water supply, sanitary systems and wastewater, administrative and maintenance buildings, and solid waste disposal.

The site of the proposed action along the entire north boundary and the northern part of the east boundaries of FAFB is a developed area and contains nearby buried infrastructure and transportation network. The Geiger Spur does have three grade crossings on FAFB: at the main gate near its north west terminus, at the access road to the new Reserve Center (Eaker Road) and then across Rambo Road at the southeast terminus of the project. Figure 3 illustrates locations of existing utilities and infrastructure proximate to the proposed location for Alternative 1.

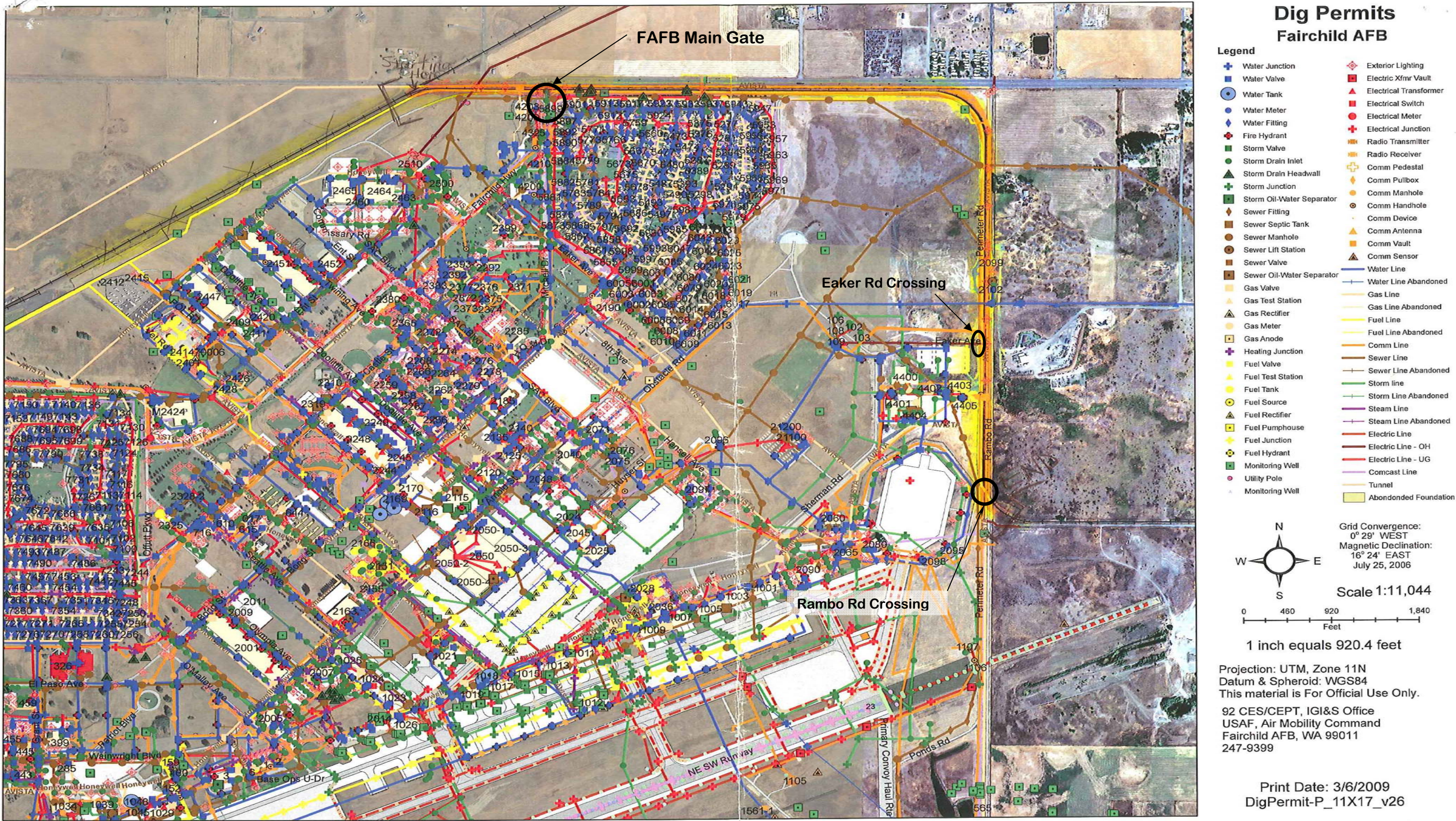
### **3.8 Land Use**

Land use refers to real property classifications of conditions and uses either present or in planned future goals. The objective of land use planning is to ensure orderly growth and compatible uses.

Locally, Fairchild AFB is surrounded primarily by agricultural uses, with increasing residential development. The nearest town, Airway Heights, is approximately two miles to the east. State Route 2 moves local and regional traffic from the City of Spokane and Airway Heights to local roads, to FAFB and to the west.



Figure 3 Infrastructure in Area of Geiger Spur Track Removal Project– Alternative 1





FAFB land use classifications are: airfield/industrial, community, administrative, open space, outdoor recreation, training, Survival School Area, and Washington Air National Guard. Constraints to land uses are safety zones around potentially explosive areas, wetlands, threatened and endangered species and habitats, cultural resources, and other areas that present public hazards such as contamination sites. Table 1 summarizes the various existing and planned land uses and their area on FAFB. Figure 4 shows the locations of land use classifications for FAFB.

| <b>Table 1: Current Land Use/Constraints at FAFB Land Use Category</b> | <b>Current Use (acres)</b> | <b>Planned Future Use (acres)</b> |
|--|----------------------------|-----------------------------------|
| Administrative   | 83                         | 242                               |
| Airfield, Maintenance, Industrial, Training                            | 2022                       | 2082                              |
| Community  | 473                        | 742                               |
| Outdoor Recreation   | 203                        | 113                               |
| Survival School  | 90                         | 238                               |
| WA Air National Guard  | 65                         | 107                               |
| Wetlands   | 212                        | 212                               |
| Conservation Area  | 72                         | 72                                |

*Note: The remaining 700 acres is occupied by roads, the “wildlife area”, and other lands available for development. The proposed 12 acres of area for Alternative 1 is with in the “open space area” but runs near the community, family housing, reserve center (industrial), aircraft operation and airfield areas on FAFB. See Fig. 4.*

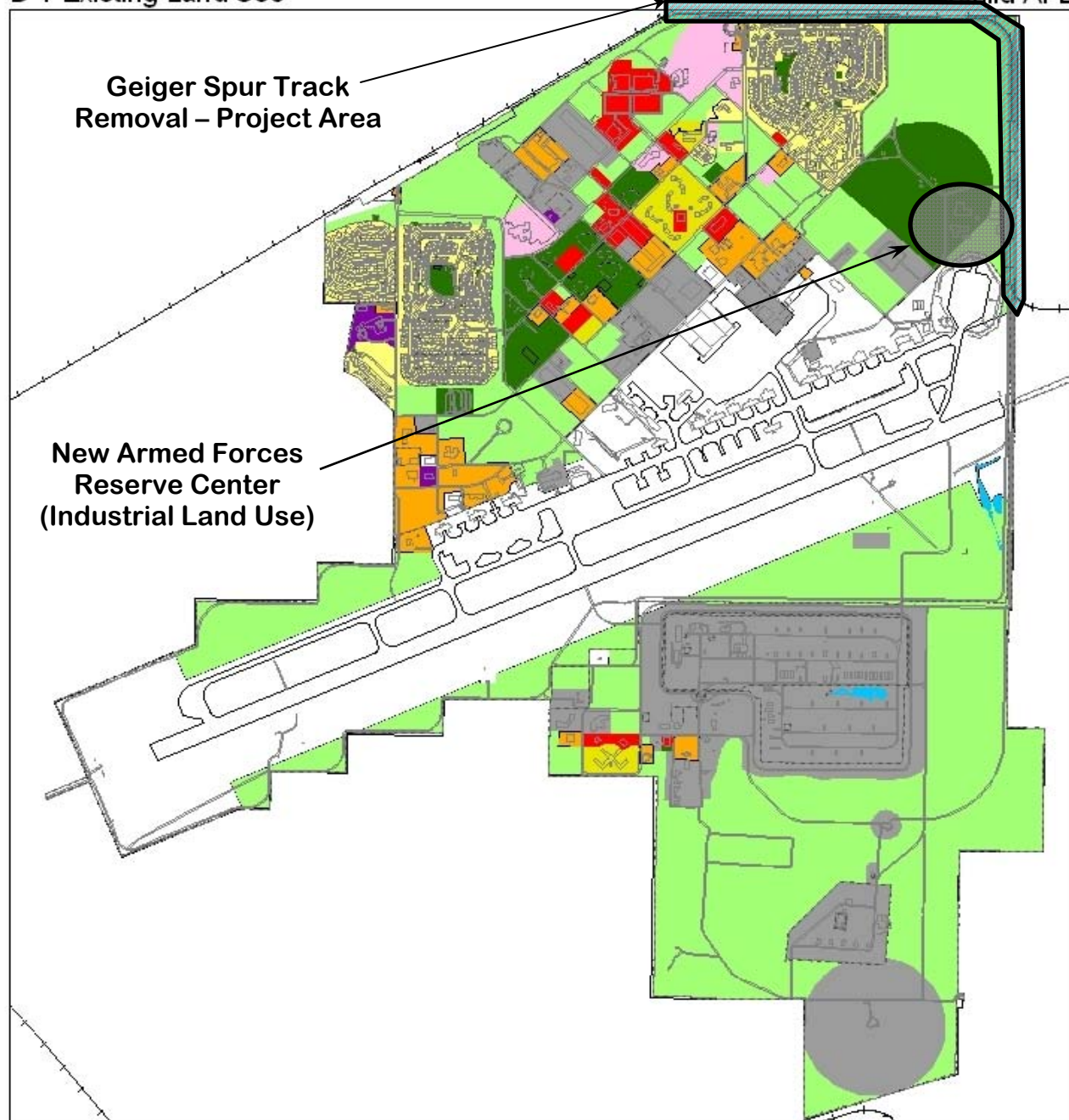
### **3.9 Wastes, Pollution Prevention, and Hazardous Materials**

**Hazardous Materials and Waste and Pollution Prevention** Hazardous material is defined as any substance with physical properties of ignitability, corrosively, reactivity, or toxicity that could cause an increase in mortality, serious irreversible illness, and incapacitating reversible illness or that might pose a substantial threat to human health or the environment.

Hazardous materials and waste at FAFB include flammable solvents, fuels and lubricants, paint/coating, stripping chemicals, waste oils and solvents, contaminated fuels and lubricants, waste paint-related materials, disposal of legacy building materials such as asbestos and lead based paint. FAFB produces more than 1,000 kg of hazardous waste per month and is considered a large quantity hazardous waste generator. Approximately 75 percent of wastes are generated from aircraft maintenance activities, 10 percent from motor vehicle maintenance activities, 10 percent from civil engineering activities, and 5 percent from other sources. There are 187 satellite accumulation points on the installation and one 90 day accumulation site. Waste containers are picked up and transported to an off-installation licensed Treatment, Storage, and Disposal Facility.

# D-1 Existing Land Use

Fairchild AFB



Projection: Universal Transverse  
Mercator (UTM), Zone 11 N  
Datum & Spheroid: WGS84, WGS84

Map data originally from June  
2002 aerial survey. Data layers  
continuously updated by ground  
surveys. Contact Fairchild AFB  
Geointegration Office for  
current map.

## Land Management Zones

|                 |              |             |
|-----------------|--------------|-------------|
| Admin           | Hsg-Accomp   | Open        |
| Airfield        | Hsg-Unaccomp | Outdoor Rec |
| Cmty-Commercial | Indust       | Water       |
| Cmty-Service    | Med          |             |

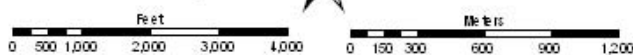
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USAF, Air Mobility Command  
Fairchild AFB, WA 99011

DATE: 3/5/2006

FILE: C1\_36x48\_v2.mxd

Scale - 1:29,506



Fairchild AFB  
Magnetic Declination: 16°33' EAST  
Annual Change 0°10' WEST  
September 13, 2005

92 CES/CEOG, GeoBase Office  
92ces.ceog@fairchild.af.mil 247-9399  
<https://gilk2w2as101.website/fairchild>

**Figure 4: FAFB Land Use Classifications and Location Map**



Hazardous materials and waste potentially located in the soils on the Geiger Spur operating area would include those materials and wastes normally associated with operation of an industrial railroad spur line including: petroleum, oils and lubricants from leaking or spilling from rail cars, creosote leaching from railroad ties, and exhausts from the rail engines. See the Environmental Baseline Survey for Geiger Spur of 14 May 2004 in Appendix A.

As part of the License Agreement, FAFB requested that the County update the 2004 Preliminary Environmental Impact Analysis and Environmental Baseline Survey. Although no specific significant release of contaminants was identified, to insure the area is being left in a safe condition for current FAFB users and future land uses, soil sampling was performed to screen for significant contamination and insure that material removed from FAFB was disposed of in a appropriate location. The existing ballast and sub-base materials of the Geiger Spur have been tested for likely hazardous material contaminants, including poly aromatic hydrocarbons (PAHs), Total Petroleum and Hydrocarbons (TPH), metals (RCRA 8 and zinc) and PCBs.

The analytical results indicate that all concentration of TPH in the diesel and heavy oil ranges were below the MTCA Method A cleanup levels for unrestricted land uses. PCB's were not detected at or above the method reporting level. Concentrations of arsenic, barium, cadmium, lead and zinc were reported at levels below the MTCA Method A or B cleanup levels for unrestricted land uses. Mercury, selenium and silver were not detected at or above the method reporting levels. All detected total metal concentrations were less than 20 percent of the concentration specified in the Dangerous Waste Regulation toxicity characterizes list (VAC 173-303-090), and therefore a Toxicity Characteristic Leaching Procedure (TCLP) was not conducted.

PAH constituents were present in all but 5 of the 26 soil samples analyzed. Toxicity equivalent concentration (TEC) was calculated for each sample using the toxicity equivalency factor methodology adopted by Ecology on October 12, 2007. The calculated total TEC levels indicate that 8 of these samples exceeded the MTCA Method B cleanup level of 0.137 mg/kg. However, the calculated total TEC concentration for all samples of the sub-ballast soils at 18-inch depth were below this MTCA cleanup level. Details on the sampling plan and analytical results can be found in Appendix B, Ballast and Sub-Base Soil Sampling Report for the Geiger Spur Track Removal Project, June 2, 2009.

### **Environmental Restoration Program**

The purpose of the Air Force Environmental Restoration Program (ERP) is to identify, characterize, and evaluate past disposal sites and remediate contamination on its installations as needed to control migration of contaminants and potential hazards to ecological resources, human health, and the environment in accordance with CERCLA requirements. A total of 37 ERP sites are present at Fairchild AFB. ERP site SS-39, a TCE plume, underlies much of the runway area and to the north toward military housing. However, there appears to be a geologic "dam" that keeps flow from moving eastward toward the area of influence of the proposed project. This

plume is located 40-50 feet below the ground surface. Fairchild AFB requires specific procedures be followed if contaminated soil is discovered during excavation.

No contamination of groundwater or soils has been identified directly below the area proposed in Alternative 1. ERP sites have been identified and most have been remediated. Processes are well in place to survey, abate, and protect from exposure to humans or further exposure to the environment if contamination is encountered.

### **Non-Hazardous Solid Waste**

The steel rail road track and metal hardware (spikes, plates, switches, etc.) will also be removed from FAFB. With this removal they will become a non-hazardous waste.

### **3.10 Safety and Occupational Health**

All applicable standards, such as those required by the Occupational Safety and Health Act (OSHA) are strictly followed at FAFB. Base personnel are regularly briefed on hazards and safety concerns existing in their particular workplace. All contractors performing construction activities are responsible for following ground safety and OSHA regulations. Industrial hygiene programs monitor human exposure to hazardous materials and safety equipment and procedures are continually inspected.

There are several areas at FAFB that are constrained by explosive clear zones. These zones are associated with the Alert Area, Explosive Combat Aircraft parking, and the Munitions Storage Area. Transportation routes for explosives also are present in the area using Gate 23 Road.

Range sites on FAFB contain various munitions, unexploded ordnance (UXO), and Chemical Agent Identification Sets (CAIS). Surface disposal sites have been removed. However, munitions, UXO, and CAIS still can be found below the ground surface near and adjacent to range sites.

The proposed project area is north and east of the Old Skeet Range, a small arms range, and to the north and east of a historic Target Butt 20mm caliber boresite range. All ranges are considered to be a distance away from the proposed site. Given Geiger Spurs on-going use as a railroad since the development of FAFB, it is unlikely that munitions of any kind would be found on site. The range for ammunition used at the skeet range is about 700 feet and the direction of firing was to the north and east of the proposed project location. No firing points or target areas were located at the Target Butt site during a 2006 site reconnaissance conducted by Contract W9128F-04-D-0001-0038 (URS 2006). Both areas are thought not to have unexploded ordnances remaining (URS 2006). Thus, the potential hazard is minimal for lead exposure and none for UXO for the project area. Standard procedure when munitions are expected is for monitoring during construction and to implement mitigation as needed.

Potential hazard exists associated with jet blast near runway and parking facilities of aircraft. Based upon idle thrust requirements of KC135 aircraft, safe distance for operations is 400 feet away from the aircraft (based on UFC 3-260-01 and ETL 1110-3-394). Worse case estimates for larger aircraft requirements based upon take-off thrust are calculated at 900 feet.

### **3.11 Socioeconomics**

Socioeconomics are defined as the basic attributes and resources associated with the human environment, particularly population and economic activity. Federal Actions to “Address Environmental Justice in Minority Populations and Low-Income Populations” directs Federal agencies to address environmental and human health conditions in minority and low-income communities. The general purposes of this Executive Order are:

- To focus attention of Federal agencies on the human health and environmental conditions in minority communities and low-income communities with the goal of achieving environmental justice;
- To foster non-discrimination in Federal programs that substantially affect human health or the environment; and
- To give minority communities and low-income communities greater opportunities for public participation in and access to public information on matters relating to human health and the environment.

Described below are two categories, social and economic condition and environmental justice.

#### **Social and Economic Condition.**

FAFB is approximately 12 miles west of Spokane, Washington, in Spokane County. Population of Spokane County in 2000 was 417,939 (U.S. Census Bureau 2000). Between 1990 and 2000, Washington’s population increased by 21 percent. In the same period of time, Spokane grew by 16 percent. The top industry is education, healthcare, and social services. Public administration is the second highest area of industry, regionally. And as would be expected, there is a larger portion of the population in the Spokane area employed by the Armed Forces compared with the State.

In 2000, the unemployment rate for the region was 4.6 percent which was slightly higher than for the State at 4.1 percent. The region has a lower median household income and per capita income and a higher percentage of individuals below the poverty threshold than for the State. Education level is slightly higher for the

region than for the state average. FAFB is the largest employer in the Inland Northwest and employs approximately 5,400 military and civilian employees. The annual payroll of FAFB is approximately \$203 million and it is estimated that FAFB indirectly creates an additional 2,150 jobs and \$82 million in payroll from support jobs throughout the community.

**Environmental Justice.**

Based on the results of the 2000 Census, areas within and nearest FAFB have the highest population of African Americans than for the Spokane area or the State. The area southeast of FAFB had the highest percentage of individuals below the poverty level and the lowest per capita income.

## **Chapter 4: Environmental Consequences**

### **4.1 Introduction**

This section describes the anticipated environmental consequences or impacts that could result from implementing the proposed actions. The significance of an action is analyzed in several contexts including several scales as needed, short term and long term impacts, direct and indirect impacts, and cumulative impacts.

### **4.2 Air Quality and Noise**

The environmental consequences to local and regional air quality conditions as a result of the proposed action is determined based upon the increases in regulated pollutant emissions relative to existing conditions and ambient air quality. A significant impact would be found if the action led to one or more of the following: 1) cause or contribute to a violation of air quality standards; 2) expose sensitive receptors to increased pollutant concentrations; 3) represent an increase of 10 percent or more of an affected emissions inventory; or 4) delay attainment or exceed any evaluation criteria established by a state implementation plan.

Noise impact analysis typically evaluates potential changes to the existing noise environment that would result from implementation of a proposed action. Potential changes in the noise environment can be beneficial or adverse.

#### **4.2.1 Alternative 1 – Preferred**

Regulated pollutant emissions from the proposed action would not contribute to or affect local or regional attainment status. The proposed action would temporarily result in a slight increase in air pollutant levels in the vicinity during construction activities. Off-site and on-site effects from dust would be abated through dust control measures during construction such as the use of tackifiers and watering of bare soil areas. Fugitive dust situations would be rare and readily dissipated by the westerly flow of winds normal for the area during the construction season. The proposed action has a no permanent increase in commuter and personal vehicular emissions.

Calculations for cumulative impacts on a five year construction program at FAFB result in a finding of far less than the increase of ten percent emissions in the affected emissions inventory for FAFB. A worse case scenario model suggests that impacts on dust and other emissions would be far below a significant level (e2m 2006). This five year program is far more substantial than the Geiger Spur Track Removal project. It can be concluded that construction activities associated with this project would not have adverse impacts to air quality.

A short term impact to the noise environment would occur during construction from heavy equipment. This noise is not expected to be different than noise already occurring at FAFB associated with industrial and maintenance activities. Ambient noise levels are not expected to increase over existing levels. No long term impact to health or quality of life from noise is anticipated with this action.

#### **4.2.2 No Action Alternative**

The No Action alternative would result in unchanged conditions at FAFB. The base would continue to operate in compliance with all permits, with minimal impact to air quality and noise levels.

### **4.3 Water Resources**

Evaluation criteria for impacts on water resources are based on water availability, water quality, and impacts to beneficial uses. Standards are established by federal and state law.

#### **4.3.1 Alternative 1 - Preferred**

***Stormwater Facilities:*** There is limited existing stormwater infrastructure related to the Geiger Spur line itself. Culverts allowing water to flow under the rail tracks are being removed, area will be graded to allow proper drainage, and as impervious surfaces are being reduced no additional facilities are needed.

Washington State Department of Transportation does have underground conveyance within the vicinity of the Hwy. 2 underpass at the Northwest corner of the base. Stormwater is pumped from underpass catch basins up and under the Geiger Spur in to a grassy swale on the south side of the Geiger Spur track. This system will not be disturbed by this project.

***Surface Water Quality:*** Storm water runoff from construction activities would disperse and infiltrate into open fields adjacent to the project site. Runoff from stockpiles and disturbed areas would be contained to control the amount of storm water sediment released during construction as designated by the project Storm Water Pollution Prevention Plan. After construction, disturbed areas will be seeded with dryland grass, minimizing runoff and allowing sediments to filter out of storm water before being released to adjacent agricultural fields and undeveloped areas. With the removal of impervious surfaces (rail and ties) and near impervious surfaces (compacted base) associated with the railroad, runoff quantities should also be reduced. There are no surface watercourses that connect to streams or waters of the State flowing from the project site. No short term or long term, direct impacts would occur as a result of the proposed action.

***Water Availability.*** Water is supplied by wells located along the Spokane River and pumped to FAFB. Water availability from these wells is expected to be adequate for the additional temporary demand during construction activities. FAFB has been undergoing a water conservation effort and has realized a decrease from 6 million gallons to 4 million gallons annually in the last several years. This decrease suggests that there is at least a 2 million gallon surplus capacity which is ample supply for and temporary additional demand.

**Groundwater.** The proposed action would likely have no effect on area aquifers. Although FAFB does have a well in the area aquifer, the main supply of water comes from the Hangman aquifer upstream from the Spokane River. The West Plains well is only used as an emergency supply. The previous section demonstrated that the wells along the Spokane River have adequate capacity to supply the Bases needs. Water quality should not be affected adversely as storm water flow is filtered through soil material prior to reaching the water table. Ground water quality will be protected with the removal of any soils contaminated with significant hazardous materials and the replacement of the impervious surfaces with vegetated surfaces.

**Wetlands.** There are no wetlands within or near the project area.

During construction of the facility, there is a higher potential for water contamination. To minimize this risk, the contractor would be required to implement the project SWPPP during construction. This plan would require approval from the FAFB to ensure compliance with appropriate regulations. Such a plan requires the use of best management practices to protect water quality. When the above stipulations are met, there should be no significant water quality impacts during construction.

#### **4.3.2 No-Action Alternative**

The water quality and availability environment would remain the same as baseline conditions. There would be no potential for water quality impacts during construction, since no such activity would occur. FAFB would continue to comply with local, state, and federal regulations. Potential ground water contamination from existing contaminated fill, ballast and ties would remain.

### **4.4 Geologic Resources**

#### **4.4.1 Alternative 1 - Preferred**

The proposed action would result in considerable ground disturbance. Potential impacts would be mitigated by use of erosion control best management practices including weed control and revegetation. All construction activities are guided by Base Construction Standards which include environmental protection standards. The general area is flat lying which minimizes hazard and increases potential for compliance.

Earthwork would be planned and conducted in a manner to minimize duration of exposure of unprotected soils. Work would be conducted in accordance with best management practices for erosion control, as outlined by the Storm Water Pollution Prevention Plan for the proposed project. Reseeding with dry land grasses of exposed surfaces following completion of construction would minimize the potential for erosion. For these reasons, no significant geologic, physiographic, or soil impacts are anticipated as a result of the proposed activities.

#### **4.4.2 No-Action Alternative**

The No Action alternative results in no change in existing geologic resources.

### **4.5 Biological Resources**

#### **4.5.1 Alternative 1 - Preferred**

The proposed action would result in an increase of approximately 12 acres of unimproved, dry grassland and open space. The pictures below in Figure 5 were taken of the existing site in May 2009. The existing quality of the habitat is poor. Some forage of small mammals and birds occurs in the area currently. The area is kept in a mowed condition to reduce the fire hazard from operation of the railroad. There is over 700 acres of higher quality, unimproved lands with approximately 200 acres of wetlands in the southern portion of the Base for wildlife to displace to from the proposed area. There are no federally or state listed species occurring in the project area. There are no known nest sites of protected species within the region of influence of construction noise. Therefore, no significant adverse effects to wildlife or vegetation are anticipated as a result of the proposed action, in fact habitat will improve with this proposed project.

#### **4.5.2 No-Action Alternative**

The No Action alternative results in no change in existing biologic resources.

### **4.6 Cultural Resources**

Impacts on cultural resources are addressed under Section 106 of the National Historic Preservation Act and 36 CFR 800. Adverse impacts on cultural resources might include physical alteration, damage, or destruction of all or part of a resource; alteration of characteristics of the surrounding environment that contribute to the resource's significance; introduction of visual or audible elements that are out of character with the property or that alter its setting; neglect of the resource to the extent that it deteriorates or is destroyed; or the sale, or transfer, or lease of the property out of agency ownership without adequate legally enforceable restrictions or conditions to ensure preservation of the property's historic significance.

#### **4.6.1 Alternative 1 - Preferred**

No National Register of Historic Places (NRHP) eligible archaeological resources have been documented within or near the region of influence of the proposed project. According to the FAFB Integrated Cultural Resources Management Plan (ICRMP), the probability is low that undisturbed, significant archaeological resources, including human graves, would be discovered during future construction. The ICRMP sets forth standard procedures that must be followed in the event any type of archaeological site is discovered during the course of earth-disturbing activity on base. The proposed action is not expected to result in any effects to archaeological resources on FAFB.

No NRHP-eligible historic resources are located within the region of influence of the proposed structure. The proposed action would not result in the demolition or alteration of any historic properties or structures. There would be no potential impacts to historic structures.



**Figure 5. Setting for Proposed Location – Alternative 1 - 2009 Photos**

**New Eaker Rd. crossing just  
South of Rambo Rd. Gate**



**Looking west along Geiger Spur toward  
the main gate with recreation  
trail/access road to south and FAFB  
boundary fence and Hwy. 2 to the  
north.**



**Looking north toward Hwy. 2 as  
track turns west, north of the Rambo  
Gate.**

**FAFB Main Gate Crossing (2006)**



There are no documented sites or areas of known cultural importance to local Native American tribes at FAFB. Potential is low for discovery of such sites. The proposed action will be implemented in accordance with the Fairchild AFB ICRMP, which specifies notification procedures applicable to Native American groups. The proposed action is not anticipated to impact Native American concerns.

#### **4.6.2 No-Action Alternative**

There would be no potential effects relating to cultural resources if the no-action alternative is chosen. No earth-moving would be completed; therefore, no unknown cultural resources could potentially be discovered. FAFB would continue to be managed as outlined in the ICRMP.

#### **4.7 Infrastructure and Utilities**

Effects on infrastructure are evaluated based on their potential for disruption or improvement of existing levels of service and additional needs for energy and water consumption, sanitary sewer and wastewater systems, and transportation patterns and circulation. An effect might be considered adverse if a proposed action exceeds capacity of the infrastructure or utility or disrupts service or operations.

##### **4.7.1 Alternative 1 - Preferred**

The proposed action removes 2.01 miles of rail track, including rails, ties, ballast. This project would not use any existing utilities such as communications, water, sanitary sewer, IT, and storm water. Track will be removed at two crossings; the Rambo road crossing at the southeast end of the project and the Mitchell Road crossing at the Main Gate near the northwest end of the project. It will therefore have a positive impact on the transportation network of FAFB by removing these potential obstructions.

##### **4.7.2 No-Action Alternative**

All FAFB infrastructure conditions would remain the same as existing.

#### **4.8 Land Use**

The significance of potential land use impacts is based on the level of land resource sensitivity and compatibility with the proposed action. In general, a land use impact would be significant if it were to be inconsistent or in noncompliance with existing land use or stewardship plans or policies, preclude the viability of existing land use, or conflict with planning criteria established to ensure the safety and protection of human life and property.

##### **4.8.1 Alternative 1 - Preferred**

About 12 acres strip of land along the north and north east boundaries of FAFB will be converted from an industrial transportation land use to undeveloped open space

land use. Adjacent land uses would remain the same. This change is compatible with land use policies; in fact it resolves existing land use conflicts with removal of an unrelated industrial railroad from the Base and removal of three at-grade railroad crossings.

The removal of this railroad spur is consistent with the FAFB General Plan (92ARW 2005). The southeast end of the proposed location is near the north end of the runway and near a designated QD explosive arc zone. Removal of these facilities in this area will reduce exposure to these areas of hazard.

#### **4.8.2 No-Action Alternative**

No action would result in no changes to current land use.

#### **4.9 Wastes, Pollution Prevention, Hazardous Materials and Environmental Restoration Program**

Impacts on hazardous materials and waste management would be considered significant if the proposed action resulted in noncompliance with applicable Federal and state regulations, or increased the amounts generated or procured beyond FAFB capacity to obtain permits or for disposal or the action exposed humans or the environment to adverse impact from contaminated ERP sites.

##### **4.9.1 Alternative 1 - Preferred**

***Hazardous Materials and Waste and Pollution Prevention.*** The proposed action will require handling and removal of hazardous materials associated with the railroad operation, specifically the railroad ties and the associated soil contaminated with poly aromatic hydrocarbons (PAHs) that are related to creosote in ties and that were identified above cleanup levels in the surface ballast materials. The County is proposing to cleanup this PAH contamination under the Washington State Voluntary Cleanup Program (VCP). The cleanup will be done in accordance with the Cleanup Action Plan for the Geiger Spur Track Removal Project, June 15, 2010 in Appendix C. In the opinion of the Washington State Department of Ecology, provided September 29, 2010, upon completion of this proposed cleanup, further remedial action will not likely be necessary to clean up contamination at the Geiger Spur Track Removal site.

The railroad ties, as the identified source of the contamination, will be removed in their entirety from the site. Railroad ties are an exempt dangerous waste when handled in accordance with WAC 173-303-071(g). Therefore ties that are in good condition will be salvaged and recycled. Ties that have no salvage value will be disposed of in accordance with WAC 173-303-071(g). Used railroad ties can be accepted at the nearby Graham Road Landfill for disposal.

The cleanup of the PAH contaminated ballast and sub-ballast soils as proposed in the Cleanup Action Plan will consist of excavation and removal of contaminated soils directly beneath the railroad ties (the approximately 10 ft. wide railroad bed), where the contamination has been identified. Based on initial sample analysis, visual observations, and the low mobility of the tar and PAH constituents, it is anticipated

that the cPAH contaminated material is located within the top 4 inches of the ballast. The cleanup level is based on MTCA Method B soil cleanup levels for unrestricted land uses. The proposed cleanup level for carcinogenic PAHs (cPAHs) at the site is based on the TEF methodology for mixtures of cPAHs and the proposed cPAH total TEC is 0.137 mg/kg.

Soils above cleanup levels will be disposed of at a lined landfill consistent with the landfill operator's requirements. Only lined landfills permitted in accordance with chapter 173-350 WAC or chapter 173-351 WAC will be considered for disposal sites. Soils that do not exceed the cleanup level will be re-used in the vicinity of the Geiger Spur site. Confirmation surface sampling and analysis will be done after excavation to insure the cleanup standards have been obtained throughout the site. See the Cleanup Action Plan for the Geiger Spur Track Removal Project, June 15, 2010 in Appendix C for details on remediation procedures and sampling protocols.

Some construction materials may contain hazardous materials although it is anticipated that the amount of these materials are minimal during construction and use is temporary.

This project would be required to follow all FAFB and Air Force environment management policies governing the regarding and/or handling of any hazardous materials/waste contaminated soils. These policies are in place to safeguard the public, personnel, and the environment. Also, disposal of materials removed from the FAFB would be required to meet applicable Federal, State and local regulations related to hazardous material disposal.

***Asbestos Containing Materials(ACM) and Lead-Based Paint(LBP).*** Specifications for the proposed track removal and Air Force regulations prohibit the use of ACM and LBP for new construction. These materials were also not identified on the existing track being removed.

***Environmental Restoration Program.*** There are no ERP sites identified within the 12 acre area of the proposed action. With all sites on military bases, contractors must prepare a health and safety plan to identify potential hazards. Base construction standards also require contractors to stop work and request an investigation if suspicious materials are uncovered. The only hazard identified is the potential for unspent small arms munitions in soils may be a source of lead. The amounts are thought to be very small and not a significant health or safety hazard.

During construction of the facility, there is a slight chance that a hazardous materials spill could occur. As a precautionary measure, the construction contractor would be trained to take immediate action to contain any spill. The contractor would then be required to contact the Environmental Flight. The contractor would be held liable for the cleanup of any spill that may occur, in accordance with applicable regulations.

#### ***Non-Hazardous Solid Waste***

The steel rail road track and metal hardware (spikes, plates, switches, etc.) will also be removed from FAFB. As most of this material is still usable in the construction

and repair of other rail lines, it will most likely be sold for reuse by the removal contractor. Any unusable components will be recycled as metal scrap.

#### **4.9.2 No-Action Alternative**

No-Action would result in no changes to the existing operations and conditions regarding handling or exposure to hazardous material or wastes. The railroad track, ties, ballast, and any contaminated soils or other materials associated with the historic use of the project area by the Geiger Spur railroad operations would remain.

### **4.10 Safety and Occupational Health**

#### **4.10.1 Alternative 1 - Preferred**

There are no major safety and occupational health consequences related to the proposed action. Construction contractors are trained so that work would be performed in accordance with safety and occupational health standards, such as those required by the Occupational Safety and Health Act (OSHA). The contractor will be required to submit a site specific safety and health plan, as described in the Army Corps of Engineers Manual 385-1-1, *Safety and Health Requirements*. Included in this would be safety precautions related to handling of any contaminated soils encountered.

Removal of the rail line and any associated hazardous materials will improve the opportunity to provide a safe working and living environment and minimize the opportunity for groundwater contamination due to past rail operations.

The Project is sited 400 feet away from the nearest source of potential jet blast. Removal of this railroad use from this area will reduce exposure to this hazard.

#### **4.10.2 No-Action Alternative**

No change occurs in the existing work environment for either FAFB personnel or Armed Forces personnel.

### **4.11 Socioeconomics**

#### **4.11.1 Alternative 1 – Preferred**

This project will not result in any change or impact to the Social and Economic Conditions on or near FAFB nor will it result in any disproportionate impacts on low income populations on or near FAFB. Removal of the industrial rail line from the FAFB will improve access to residential Base populations and improve aesthetics adjacent to the residential area of the FAFB.

#### **4.11.2 No Action Alternative**

No change in the existing operations would result in status quo whereas no indirect or cumulative effects at FAFB would be realized.

#### **4.12 Indirect and Cumulative Impacts**

Cumulative impacts are the incremental effects of an action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Actions may be direct or indirect. The degree and kind of impact may be different depending on the length of time the impact occurs or the extent of area the impact is exhibited; in other words, time and space. Generally, assessing impacts to water resources require assessment of several geographic scales and often long spans of time. In contrast, impacts to infrastructure can be observed within a short time frame and over a smaller geographic area.

##### **4.12.1 Alternative 1 - Preferred**

Removal of the Geiger Spur rail line from FAFB would allow potential future but unforeseen other land uses for the area. Given its narrow location along the north and north eastern boundary of the base, future uses would be limited. The FAFB General Plan was developed to minimize adverse impacts of future land use decisions. This proposed action is in compliance with the vision of the FAFB General Plan for the area.

Another indirect effect of this track removal from FAFB is that the line was rerouted with approx. 3.5 miles of new rail line constructed east and south of FAFB by Spokane County in 2008. The effects of this construction have been addressed in State Environmental Policy Act (SEPA) documents (Environmental Checklist and Determination of Non-Significance dated November 22, 2006) prepared by Spokane County per the Spokane County Environmental Ordinance.

##### **4.12.2 No Action Alternative**

No change in the existing operations would result in status quo whereas no indirect or cumulative effects at FAFB would be realized.

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## **References**

- 92ARW 1999. Hazardous Materials Emergency Response Plan and Community Right-To-Know Plan. Fairchild Air Force Base, WA
- 92 ARW 2005. General Plan for Fairchild Air Force Base, Fairchild Air Force Base, WA.
- 92 ARW 2003. Fairchild Air Force Base Hazardous Waste Management Plan. Fairchild Air Force base, WA.
- 92ARW 2003. Fairchild Air Force Base Lead Exposure and Lead-based paint Management Plan. Fairchild Air Force Base, WA.
- 92 CES/CEV 2000. Storm Water Pollution Prevention Plan for Fairchild Air Force Base. 92 CES/CEV Fairchild Air Force Base, WA.
- 92 CES/CEV 2005. Integrated Cultural Resources Management Plan. Fairchild Air Force Base, WA.
- 92 CES/CEV 2005. Integrated Natural Resources Management Plan. Fairchild Air Force Base, WA.
- 92 CES/CEV. 2005. Integrated Solid Waste Management Plan for Fairchild Air Force Base. Fairchild Air Force Base, WA.
- 92 CES/CEV 2005. Grand Forks AFB Temporary Move Environmental Analysis. Fairchild Air Force Base, WA.
- e2m 2006. Draft Environmental Assessment of Installation Development (AICUZ) at Fairchild Air Force Base, Washington. HQ AMC, Scott Air Force Base, IL.
- FAFB 2001. Hazardous Material Management Plan. Fairchild Air Force Base, WA.
- Luders, D. 2006. Summary graphs of Sanitary Sewer Discharge and Water Use. Fairchild AFB, WA.
- Natural Resource and Conservation Service 2006. Fairchild Air Force Base Soil Survey. MLRA Soil Survey Office. Spokane Valley, WA.
- URS 2006. Comprehensive Site Evaluation Phase I – Fairchild Air Force Base, Washington, Draft Report. U.S. Army Corps of Engineers Omaha District. Contract Number W9128F04-D-00001 Task Order 0038

U.S. Census Bureau 2000. "Quick Tables." Tables DP-1 from Summary File 1 and DP-2 and DP-3 from Summary File 3 for State of Washington; Spokane, Washington MSA; and Census Tracts 138,139,104.01, 104.02, and 141. Available online: <http://factfinder.census.gov>.

USAF 1995. Air Installation Compatible Use Zone (AICUZ) Study, Volumes 1 and 2. Fairchild Air Force Base, WA.

USEPA 2004. Green Book Nonattainment Areas for Criteria Pollutants. Available online: <http://www.epa.gov/oar/oaqps/greenbk>.

USEPA 2004. Spokane, Washington CO Attainment Plan. Available online: <http://yosemite.epa.gov/r10/airspace.nsf/283d45bd5bb068e68825650f0064dcd2>

USEPA 2004. Spokane, Washington PM-10 Attainment Plan. Available online: <http://yosemite.epa.gov/r10/airspace.nsf/283d45bd5bb068e68825650f0064dcd2>

## **Appendix A**

### **Environmental Baseline Survey – 2004**

## **Appendix B**

### **Ballast and Sub-Base Soil Sampling Report – June 2, 2009**

## **Appendix C**

### **Cleanup Action Plan - June 15, 2010**

## **Appendix D**

### **Applicable Laws, Regulations, Policies, and Planning Criteria**

When considering the affected environment, the various physical, biological, economic, and social environmental factors must be considered. In addition to the National Environmental Policy Act (NEPA), there are other environmental laws and Executive Orders (EOs) to be considered when preparing environmental analyses. These laws are summarized below.

#### **Noise**

The Air Installation Compatible Use Zone (AICUZ) Program, (Air Force Instruction [AFI] 32-7063), provides guidance to air installations and local communities in planning land uses compatible with airfield operations. The AICUZ program describes existing aircraft noise and flight safety zones on and near U.S. Air Force (USAF) installations.

#### **Land Use**

Land use planning in the USAF is guided by *Land Use Planning Bulletin, Base Comprehensive Planning* (HQ USAF/LEEVX, August 1, 1986). This document provides for the use of 12 basic land use types found on an Air Force installation. In addition, land use guidelines established by the U.S. Department of Housing and Urban Development (HUD) and based on findings of the Federal Interagency Committee on Noise (FICON) are used to recommend acceptable levels of noise exposure for land use.

#### **Air Quality**

The Clean Air Act (CAA) of 1970, and Amendments of 1977 and 1990 recognize that increases in air pollution result in danger to public health and welfare. To protect and enhance the quality of the Nation's air resources, the CAA authorizes the U.S. Environmental Protection Agency (USEPA) to set six National Ambient Air Quality Standards (NAAQS) which regulate carbon monoxide, lead, nitrogen dioxide, ozone, sulfur dioxide, and particulate matter pollution emissions. The CAA seeks to reduce or eliminate the creation of pollutants at their source, and designates this responsibility to state and local governments. States are directed to utilize financial and technical assistance as well as leadership from the Federal government to develop implementation plans to achieve NAAQS. Geographic areas are officially designated by USEPA as being in attainment or nonattainment to pollutants in relation to their compliance with NAAQS. Geographic regions established for air quality planning purposes are designated as Air Quality Control Regions (AQCRs). Pollutant concentration levels are measured at designated monitoring stations within the AQCR. An area with insufficient monitoring data is designated as unclassifiable. Section 309 of the CAA authorizes USEPA to review and comment on impact statements prepared by other agencies.

An agency should consider what effect an action could have on NAAQS due to short-term increases in air pollution during construction as well as long-term increases resulting from changes in traffic patterns. For actions in attainment areas, a Federal agency may also be subject to USEPA's Prevention of Significant Deterioration (PSD) regulations. These regulations apply to new major stationary sources and modifications to such sources. Although few agency facilities will actually emit pollutants, increases in pollution can result from a change in traffic patterns or volume. Section 118 of the CAA waives Federal immunity from complying with the CAA and states all Federal agencies will comply with all Federal- and state-approved requirements.

## **Safety**

AFI 91-202, *USAF Mishap Prevention Program*, implements Air Force Policy Directive (AFPD) 91-2, *Safety Programs*. It establishes mishap prevention program requirements (including the Bird/Wildlife Aircraft Strike Hazard [BASH] Program), assigns responsibilities for program elements, and contains program management information. This instruction applies to all USAF personnel.

AFI 91-301, *Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Program*, implements AFPD 91-3, *Occupational Safety and Health*, by outlining the AFOSH Program. The purpose of the AFOSH Program is to minimize loss of USAF resources and to protect USAF personnel from occupational deaths, injuries, or illnesses by managing risks. In conjunction with the USAF Mishap Prevention Program, these standards ensure all USAF workplaces meet Federal safety and health requirements. This instruction applies to all USAF activities.

## **Water Resources**

The Clean Water Act (CWA) of 1977 is an amendment to the Federal Water Pollution Control Act of 1972, is administered by USEPA, and sets the basic structure for regulating discharges of pollutants into U.S. waters. The CWA requires USEPA to establish water quality standards for specified contaminants in surface waters and forbids the discharge of pollutants from a point source into navigable waters without a National Pollutant Discharge Elimination System (NPDES) permit. NPDES permits are issued by USEPA or the appropriate state if it has assumed responsibility.

Section 404 of the CWA establishes a Federal program to regulate the discharge of dredge and fill material into waters of the United States. Section 404 permits are issued by the U.S. Army Corps of Engineers (USACE). Waters of the United States include interstate and intrastate lakes, rivers, streams, and wetlands that are used for commerce, recreation, industry, sources of fish, and other purposes. The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Each agency should consider the impact on water quality from actions such as the discharge of dredge or fill material into U.S. waters from construction, or the discharge of pollutants as a result of facility occupation.

Section 303(d) of the CWA requires states and USEPA to identify waters not meeting state water-quality standards and to develop Total Maximum Daily Loads (TMDLs). A TMDL is the maximum amount of a pollutant that a waterbody can receive and still be in compliance with state water-quality standards. After determining TMDLs for impaired waters, states are required to identify all point and nonpoint sources of pollution in a watershed that are contributing to the impairment and to develop an implementation plan that will allocate reductions to each source in order to meet the state standards. The TMDL program is currently the Nation's most comprehensive attempt to restore and improve water quality. The TMDL program does not explicitly require the protection of riparian areas. However, implementation of the TMDL typically calls for restoration of riparian areas as one of the required management measures for achieving reductions in nonpoint source pollutant loadings.

The Safe Drinking Water Act (SDWA) of 1974 establishes a Federal program to monitor and increase the safety of all commercially and publicly supplied drinking water. Congress amended the SDWA in 1986, mandating dramatic changes in nationwide safeguards for drinking water and establishing new Federal enforcement responsibility on the part of USEPA. The 1986 amendments to the SDWA require the USEPA to establish Maximum Contaminant Levels (MCLs), Maximum Contaminant Level Goals (MCLGs), and Best Available Technology (BAT) treatment techniques for organic, inorganic, radioactive, and microbial contaminants; and



turbidity. MCLGs are maximum concentrations below which no negative human health effects are known to exist. The 1996 amendments set current Federal MCLs, MCLGs, and BATs for organic, inorganic, microbiological, and radiological contaminants in public drinking water supplies.

The Wild and Scenic Rivers Act of 1968 provides for a wild and scenic river system by recognizing the remarkable values of specific rivers of the Nation. These selected rivers and their immediate environment are preserved in a free-flowing condition, without dams or other construction. The policy not only protects the water quality of the selected rivers but also provides for the enjoyment of present and future generations. Any river in a free-flowing condition is eligible for inclusion, and can be authorized as such by an Act of Congress, an act of state legislature, or by the Secretary of the Interior upon the recommendation of the governor of the state(s) through which the river flows.

## **Biological Resources**

The Endangered Species Act (ESA) of 1973 establishes a Federal program to conserve, protect, and restore threatened and endangered plants and animals and their habitats. The ESA specifically charges Federal agencies with the responsibility of using their authority to conserve threatened and endangered species. All Federal agencies must ensure any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of an endangered or threatened species or result in the destruction of critical habitat for these species, unless the agency has been granted an exemption. The Secretary of the Interior, using the best available scientific data, determines which species are officially endangered or threatened, and the U.S. Fish and Wildlife Service (USFWS) maintains the list. A list of Federal endangered species can be obtained from the Endangered Species Division, USFWS (703-358-2171). States might also have their own lists of threatened and endangered species which can be obtained by calling the appropriate State Fish and Wildlife office. Some species, such as the bald eagle, also have laws specifically for their protection (e.g., Bald Eagle Protection Act).

The Migratory Bird Treaty Act (MBTA) of 1918, as amended, implements treaties and conventions between the United States, Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Unless otherwise permitted by regulations, the MBTA makes it unlawful to pursue, hunt, take, capture, or kill; attempt to take, capture, or kill; possess, offer to or sell, barter, purchase, deliver, or cause to be shipped, exported, imported, transported, carried, or received any migratory bird, part, nest, egg, or product, manufactured or not. The MBTA also makes it unlawful to ship, transport or carry from one state, territory, or district to another, or through a foreign country, any bird, part, nest, or egg that was captured, killed, taken, shipped, transported, or carried contrary to the laws from where it was obtained; and import from Canada any bird, part, nest, or egg obtained contrary to the laws of the province from which it was obtained. The U.S. Department of the Interior has authority to arrest, with or without a warrant, a person violating the MBTA.

EO 11514, *Protection and Enhancement of Environmental Quality* (March 5, 1970), states that the President, with assistance from the Council on Environmental Quality (CEQ), will lead a national effort to provide leadership in protecting and enhancing the environment for the purpose of sustaining and enriching human life. Federal agencies are directed to meet national environmental goals through their policies, programs, and plans. Agencies should also continually monitor and evaluate their activities to protect and enhance the quality of the environment. Consistent with NEPA, agencies are directed to share information about existing or potential

environmental problems with all interested parties, including the public, in order to obtain their views.

EO 11990, *Protection of Wetlands* (May 24, 1977), directs agencies to consider alternatives to avoid adverse effects and incompatible development in wetlands. Federal agencies are to avoid new construction in wetlands, unless the agency finds there is no practicable alternative to construction in the wetland, and the proposed construction incorporates all possible measures to limit harm to the wetland.

Agencies should use economic and environmental data, agency mission statements, and any other pertinent information when deciding whether or not to build in wetlands. EO 11990 directs each agency to provide for early public review of plans for construction in wetlands.

EO 13186, *Conservation of Migratory Birds* (January 10, 2001), creates a more comprehensive strategy for the conservation of migratory birds by the Federal government. EO 13186 provides a specific framework for the Federal government's compliance with its treaty obligations to Canada, Mexico, Russia, and Japan. EO 13186 provides broad guidelines on conservation responsibilities and requires the development of more detailed guidance in a Memorandum of Understanding (MOU). EO 13186 will be coordinated and implemented by the USFWS. The MOU will outline how Federal agencies will promote conservation of migratory birds. EO 13186 requires the support of various conservation planning efforts already in progress; incorporation of bird conservation considerations into agency planning, including NEPA analyses; and reporting annually on the level of take of migratory birds.

### **Cultural Resources**

The American Indian Religious Freedom Act of 1978 and Amendments of 1994 recognize that freedom of religion for all people is an inherent right, and traditional American Indian religions are an indispensable and irreplaceable part of Indian life. It also recognized the lack of Federal policy on this issue and made it the policy of the United States to protect and preserve the inherent right of religious freedom for Native Americans. The 1994 Amendments provide clear legal protection for the use of peyote cactus as a religious sacrament. Federal agencies are responsible for evaluating their actions and policies to determine if changes should be made to protect and preserve the religious cultural rights and practices of Native Americans. These evaluations must be made in consultation with native traditional religious leaders.

The Archaeological Resource Protection Act (ARPA) of 1979 protects archaeological resources on public and American Indian lands. It provides felony-level penalties for the unauthorized excavation, removal, damage, alteration, or defacement of any archaeological resource, defined as material remains of past human life or activities which are at least 100 years old. Before archaeological resources are excavated or removed from public lands, the Federal land manager must issue a permit detailing the time, scope, location, and specific purpose of the proposed work. ARPA also fosters the exchange of information about archaeological resources between governmental agencies, the professional archaeological community, and private individuals. ARPA is implemented by regulations found in 43 CFR Part 7.

The National Historic Preservation Act (NHPA) of 1966 sets forth national policy to identify and preserve properties of state, local, and national significance. The NHPA establishes the Advisory Council on Historic Preservation (ACHP), State Historic Preservation Officers (SHPOs), and the National Register of Historic Places (NRHP). ACHP advises the President, Congress, and Federal agencies on historic preservation issues. Section 106 of the NHPA directs Federal agencies to take into account effects of their undertakings (actions and authorizations) on properties included in or eligible for the NRHP.

Section 110 sets inventory, nomination, protection, and preservation responsibilities for federally owned cultural properties. Section 106 of the act is implemented by regulations of the ACHP, 36 CFR Part 800. Agencies should coordinate studies and documents prepared under Section 106 with NEPA where appropriate. However, NEPA and NHPA are separate statutes and compliance with one does not constitute compliance with the other. For example, actions which qualify for a categorical exclusion under NEPA might still require Section 106 review under NHPA. It is the responsibility of the agency official to identify properties in the area of potential effects, and whether they are included or eligible for inclusion in the NRHP. Section 110 of the NHPA requires Federal agencies to identify, evaluate, and nominate historic property under agency control to the NRHP.

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 establishes rights of American Indian tribes to claim ownership of certain “cultural items,” defined as Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony, held or controlled by Federal agencies. Cultural items discovered on Federal or tribal lands are, in order of primacy, the property of lineal descendants, if these can be determined, and then the tribe owning the land where the items were discovered or the tribe with the closest cultural affiliation with the items. Discoveries of cultural items on Federal or tribal land must be reported to the appropriate American Indian tribe and the Federal agency with jurisdiction over the land. If the discovery is made as a result of a land use, activity in the area must stop and the items must be protected pending the outcome of consultation with the affiliated tribe.

EO 11593, *Protection and Enhancement of the Cultural Environment* (May 13, 1971), directs the Federal government to provide leadership in the preservation, restoration, and maintenance of the historic and cultural environment. Federal agencies are required to locate and evaluate all Federal sites under their jurisdiction or control which could qualify for listing on the NRHP. Agencies must allow the ACHP to comment on the alteration, demolition, sale, or transfer of property which is likely to meet the criteria for listing as determined by the Secretary of the Interior in consultation with the SHPO. Agencies must also initiate procedures to maintain federally owned sites listed on the NRHP.

EO 13007, *Indian Sacred Sites* (May 24, 1996), provides that agencies managing Federal lands, to the extent practicable, permitted by law, and not inconsistent with agency functions, shall accommodate American Indian religious practitioners’ access to and ceremonial use of American Indian sacred sites, shall avoid adversely affecting the physical integrity of such sites, and shall maintain the confidentiality of such sites. Federal agencies are responsible for informing tribes of proposed actions that could restrict future access to or ceremonial use of, or adversely affect the physical integrity of, sacred sites.

EO 13287, *Preserve America* (March 3, 2003), orders Federal agencies to take a leadership role in protection, enhancement, and contemporary use of historic properties owned by the Federal government, and promote intergovernmental cooperation and partnerships for preservation and use of historic properties. EO 13287 established new accountability for agencies with respect to inventories and stewardship.

### **Socioeconomics and Environmental Justice**

EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (February 11, 1994), directs Federal agencies to make achieving environmental justice part of their mission. Agencies must identify and address the adverse human health or environmental effects that its activities have on minority and low-income

populations, and develop agency wide environmental justice strategies. The strategy must list “programs, policies, planning and public participation processes, enforcement, and/or rulemakings related to human health or the environment that should be revised to promote enforcement of all health and environmental statutes in areas with minority populations and low-income populations, ensure greater public participation, improve research and data collection relating to the health of and environment of minority populations and low-income populations, and identify differential patterns of consumption of natural resources among minority populations and low-income populations.” A copy of the strategy and progress reports must be provided to the Federal Working Group on Environmental Justice. Responsibility for compliance with EO 12898 is with each Federal agency.

## **Hazardous Materials and Waste**

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 authorizes USEPA to respond to spills and other releases of hazardous substances to the environment, and authorizes the National Oil and Hazardous Substances Pollution Contingency Plan. CERCLA also provides a Federal “Superfund” to respond to emergencies immediately. Although the “Superfund” provides funds for cleanup of sites where potentially responsible parties cannot be identified, USEPA is authorized to recover funds through damages collected from responsible parties. This funding process places the economic burden for cleanup on polluters.

The Pollution Prevention Act (PPA) of 1990 encourages manufacturers to avoid the generation of pollution by modifying equipment and processes, redesigning products, substituting raw materials, and making improvements in management techniques, training, and inventory control.

EO 12856, *Federal Compliance with Right-to Know Laws and Pollution Prevention Requirements* (August 3, 1993) requires Federal agencies to comply with the provisions of the PPA and requires Federal agencies to ensure all necessary actions are taken to prevent pollution. In addition, in *Federal Register* Volume 58 Number 18 (January 29, 1993), CEQ provides guidance to Federal agencies on how to “incorporate pollution prevention principles, techniques, and mechanisms into their planning and decision making processes and to evaluate and report those efforts, as appropriate, in documents pursuant to NEPA.”

The Resource Conservation and Recovery Act (RCRA) of 1976 is an amendment to the Solid Waste Disposal Act. RCRA authorizes USEPA to provide for “cradle-to-grave” management of hazardous waste and sets a framework for the management of nonhazardous municipal solid waste. Under RCRA, hazardous waste is controlled from generation to disposal through tracking and permitting systems, and restrictions and controls on the placement of waste on or into the land. Under RCRA, a waste is defined as hazardous if it is ignitable, corrosive, reactive, toxic, or listed by USEPA as being hazardous.

With the Hazardous and Solid Waste Amendments (HSWA) of 1984, Congress targeted stricter standards for waste disposal and encouraged pollution prevention by prohibiting the land disposal of particular wastes. The HSWA amendments strengthen control of both hazardous and nonhazardous waste and emphasize the prevention of pollution of groundwater.

The Superfund Amendments and Reauthorization Act (SARA) of 1986 mandates strong clean-up standards and authorizes the USEPA to use a variety of incentives to encourage settlements. Title III of SARA authorizes the Emergency Planning and Community Right to Know Act (EPCRA),

which requires facility operators with “hazardous substances” or “extremely hazardous substances” to prepare comprehensive emergency plans and to report accidental releases.

EO 12856 requires Federal agencies to comply with the provisions of EPCRA. If a Federal agency acquires a contaminated site, it can be held liable for clean-up as the property owner/operator. A Federal agency can also incur liability if it leases a property, as the courts have found lessees liable as “owners.” However, if the agency exercises due diligence by conducting a Phase I Environmental Site Assessment, it can claim the “innocent purchaser” defense under CERCLA. According to Title 42 U.S. Code (U.S.C.) 9601(35), the current owner/operator must show it undertook “all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice” before buying the property to use this defense.

The Toxic Substance Control Act (TSCA) of 1976 consists of four titles. Title I established requirements and authorities to identify and control toxic chemical hazards to human health and the environment. TSCA authorized USEPA to gather information on chemical risks, require companies to test chemicals for toxic effects, and regulate chemicals with unreasonable risk. TSCA also singled out polychlorinated bi-phenyls (PCBs) for regulation, and, as a result, PCBs are being phased out. PCBs are persistent when released into the environment and accumulate in the tissues of living organisms. They have been shown to cause adverse health effects on laboratory animals and can cause adverse health effects in humans. TSCA and its regulations govern the manufacture, processing, distribution, use, marking, storage, disposal, clean-up, and release reporting requirements for numerous chemicals like PCBs.

TSCA Title II provides statutory framework for “Asbestos Hazard Emergency Response,” which applies only to schools. TSCA Title III, “Indoor Radon Abatement,” states indoor air in buildings of the United States should be as free of radon as the outside ambient air. Federal agencies are required to conduct studies on the extent of radon contamination in buildings they own. TSCA Title IV, “Lead Exposure Reduction,” directs Federal agencies to “conduct a comprehensive program to promote safe, effective, and affordable.

The Washington State Model Toxics Control Act (MTCA) provides a process for the cleanup of hazardous waste sites in Washington State. It sets strict cleanup standards to ensure that the quality of cleanup and protection of human health and the environment area not compromised. The Washington State Department of Ecology has the legal authority under MTCA to order a liable party to cleanup a hazardous waste site. However, the rules implementing the MTCA are designed to encourage independent cleanup initiated by potentially liable persons, thus provided for quicker cleanups with less legal complexity. MTCA also funds hazardous waste cleanup through a tax on the wholesale value of hazardous substances.

## **Appendix E**

### Project Area Soils Map